SITE NUMBER: B-L7-01 LOCAL NAME: Rollie's WRIA: 20.0248C

NORTH COAST OFF CHANNEL SITE INVENTORY DATA

RIVER SYSTEM: Bogachiel DATE: 9/27/89 OBSERVER: Young

CHANNEL TYPE: Partially active overflow channel now serving as a common egress for several small valley wall tribs. Partially wall-based.

TRIBUTARY TO: Bogachiel River - 20.0162

SITE LOCATION: L.B. @ River mile - 19.1 (WDF)

LEGAL DESCRIPTION:

UPPER END LOWER END RIVER TEMP

WATER TEMP: 12.5 C 12.5 C 15 C

FLOW (CFS): Trickle 0.25 -0.5

SUBSTRATE: Mostly mud and silt. Some patches of gravel in tribs.

SITE SIZE: Length- Main channel= 1400 m. RB overflow channel= 300 m.

LB tribs.= 500 m useable. Overall= 2200 m.

Width- Channel: Lower 200 m = 60-70 ft; Mid reach = 15 to 25ft; Upper reach= 10-15 ft;

Tribs= 5-15 ft.

Surface: Lower 200 m= 3-60 ft; Mid reach= 0-20 ft; Upper reach = 0-15 ft;

Tribs = 0-3 ft.

Depth- 0 to 6 inches outside of ponded areas. Beaver ponds & pools = 2 to 4 ft (deeper

in winter).

WATER SOURCE: Fed primarily by several small tribs from off the steep valley wall to the south of the So. Bogachiel Rd. Some perk from the river in the lower reach. River overflow also likely in lower reach.

<u>DIRECTIONS TO SITE:</u> Head north from Grays Harbor on Hwy 101. Turn right just south of mile post 184 onto the S. Bogachiel Rd. Proceed east on this gravel road 0.5 miles until coming to the Dowans Cr. bridge. Continue east another 1.1 miles. A trail on the north side of the road leads down the hill to the mouth of B-L7-01. The channel runs along the north side of the road for 0.5 to 0.75 miles.

FISH ACCESS AND CURRENT USE: Excellent river access. 0+ coho were seen from the mouth up to the 1st large beaver pond (i.e. the lower 125 m). Unidentified juvenile fish were seen hitting the surface in this pond and in the pond above the old grade crossing (i.e. 395 m above the mouth). Fish in the latter pond were hitting the surface in schools (similar to hatchery fish behavior). B-L7-01 has been smolt trapped by personnel from the WDF field station at Forks.

FLOODING POTENTIAL: Lower 400 m = Mod to high. Mid & upper reaches = low. Some backwater flooding seems likely in the lower & mid reaches.

LANDOWNER: Unknown at this time.

COMMENTS & RECOMMENDATIONS: B-L7-01 enters the Bogachiel at the base of a 50 ft bluff and on the outside of a 90 degree bend in the river. A medium-sized back eddy at the mouth, and a riffle/rapid area in the river just upstream, seem to create good entrance conditions. These conditions should attract many juvenile coho into B-L7-01.

The lower 200 m of B-L7-01 is wall-based, very wide (to 70 ft), and appears quite susceptible to flooding. The former WDF smolt trapping site is located about 30 m above the mouth. Three beaver dams were seen along this lower reach. At present the two lower dams are blown out. The third dam (125 m above the mouth) is intact and forms a $25 \times 70 \, \text{m}$ pond. While relatively shallow at present, this pond appears to

hold water to a depth of > 4 ft during winter. At present flows access to this beaver pond (and areas upstream) seems greatly restricted by the dam. Fish were seen rising in the beaver pond, however.

Aerial photos appear to indicate an overflow channel from the river entering B-L7-01 at the upper end of this reach. This overflow channel was not located during the field survey. Along the next 200 m reach of B-L7-01, the toe of the hill moves away from the channel and to the south of the road. Four more beaver dams occur along this reach creating a great deal of pond habitat. At present flows the dams appear very restrictive to fish passage. A small LB trib (20 to 30 gal/min at present) enters B-L7-01 near the lower end of this second reach. The trib runs through an 18 inch concrete culvert and under the S. Bogachiel Rd. about 100 m above its confluence with L-7-1. It continues along the base of the hill (south of the road) for another 100 m before turning sharply and heading steeply up the hill. No fish were observed in this small trib, but the lower 200 m may provide some rearing habitat. An old grade crosses B-L7-01 approx. 400 m upstream from the mouth. In conjunction with beaver activity, the grade helps to form a medium- sized pond (see pond data supplement). Culverts are present at the grade crossing but do not appear functional. All water leaving the pond appears to flow over the old grade. This may restrict fish access to the pond and points upstream.

An overflow channel coming from the river cuts through the old grade just north of the pond outlet and converges with B-L7-01 just downstream of the pond. This rather straight, incised channel which angles off toward the river is some 300 m long and averages 5 m in width. It contains a significant amount of very clear, pooled water which might be utilized for rearing habitat. The channel becomes much less defined and appears to end some 50 m short of the river bank.

Upstream of the pond at the old grade, B-L7-01 becomes mostly dry as it meanders along the north side of the road for some 600 m. Two very small LB tribs trickle into B-L7-01 near the lower end of this middle reach and promptly dry up. A number of small beaver dams were also seen here. The channel becomes quite brushy and at times poorly defined in the middle part of this reach.

Two private driveways cross the channel in the upper third of this middle reach. Both use CMP culverts. The lower culvert has a 2 ft diameter and is 10 to 12 ft long. The upper culvert has a 30 inch diameter and is about 18 ft long.

A small to moderate sized LB trib enters B-L7-01 at the upper end of the middle reach. This trib runs through a 3 ft diameter, 25 to 30 ft long, CMP culvert under the S. Bogachiel Rd. about 25 m above its confluence with B-L7-01. At this time the trib was mostly dry. A trickle of water was seen in the lower end. The trib meanders along the base of the hill (south of the road) for about 300 m before making a hard turn and running steeply up the hill. Some winter rearing area may be available in this lower portion of the trib.

The uppermost reach of B-L7-01 (above the upper LB trib) is a mostly dry and brushy channel which appears to have no intrinsic water source. This 300 m long reach angles away from the road, runs behind a rural residence (Amsdel's) and ends at the LB of the Bogachiel just downstream from the mouth of Hemp Hill Cr. Part of an old grade crosses B-L7-01 some 30 m from the river. The apparent lack of a culvert in this grade seems to prevent river water from entering the upper end of B-L7-01 during high winter flows.

According to a local resident (Mr. Amsdel) B-L7-01 used to function as the lower end of Hemp Hill Creek until the river cut into the channel. By the character of the channel this must have occurred many years ago.

B-L7-01 appears to provide some very nice rearing habitat. The lower 400 m of the channel appears very susceptible to overflow flooding from the river. Upstream of the old grade crossing the channel appears much more protected from severe flooding. Any major habitat improvements should be limited to the 700 m reach between the old grade and the upper LB trib. Habitat enhancement in the lower end of the two major LB tribs might also be feasible.

Need to observe this channel through the winter. Should minnow trap to determine extent of current utilization. Deepening of the channel and removal of barriers may be the most feasible type of project.

RIVER SYSTEM: Bogachiel
SITE NUMBER: B-L7-01
POND NAME: Rollie's Pond

POND DATA SUPPLEMENT

DATE: 9/27/89

OBSERVER: Young

INLET

OUTLET

WATER TEMPERATURE:

(No temps taken)

POND SIZE:

LENGTH - 110 m **WIDTH** - Max = 25 m. Avg = 15 -20 m. **EST. MAXIMUM DEPTH** - > 3ft

(If dry est. depth from high water mark on bank)

WATER SOURCE: Small to medium valley wall tribs from off of the steep

hillside to the south of the channel.

FISH ACCESS & CURRENT USE: The pond does not appear accessible at present flows. Water flowing out of the pond must flow over the old grade which helps to form the pond. This flow pattern may be very restrictive and only allow fish to enter at certain water levels. Unidentified fish were present in the pond. The fish were hitting the water's surface in schools near the lower end of the pond (much like hatchery fish at feeding time). Need to check with personnel at the Forks office to see if this pond was planted.

TYPE & AMOUNT OF IN POND COVER: The dark color and depth of the water probably provide some cover. Some L.O.D. and other smaller woody debris are also present.

COMMENTS & RECOMMENDATIONS: Check with Forks Lab to see if this pond was planted. May want to minnow trap to establish extent of current utilization. Watch flows here throughout the Winter and Spring. Any efforts to improving fish passage at the old grade crossing should be beneficial.

DATE: 11/7/89

OBSERVER: Young

There is currently 1 to 2 cfs of water running across the old grade crossing in the middle reach of the channel (i.e. at the outlet of Rollie's pond). There is now a good deal of ponded water both above and below the old grade.

DATE: 11/14/89

OBSERVER: Young

Revisited channel B-L7-01 after the heavy rains of last week (Nov.8 & 9). It was quite apparent that a lot of water had flowed through the lower end of the channel. Most of this water appeared to enter B-L7-01 from the overflow channel which enters just below the pond at the old grade crossing. This confirms that habitat enhancements in B-L7-01 should be restricted to the areas upstream of the old grade crossing.

DATE: 2/9/90

OBSERVER: King

- The beaver dam at the lower end of Rollie's Pond has blown out on the right bank end and water is flowing down the old grade and into the overflow channel.
- Strong H2S smell in the overflow channel with orange coloring on the rocks. Evidence of river flows from this point downstream during earlier floods.
- Entire channel looks accessible at this flow although the area downstream from the overflow channel was not walked out.

DATE: 4/3/90

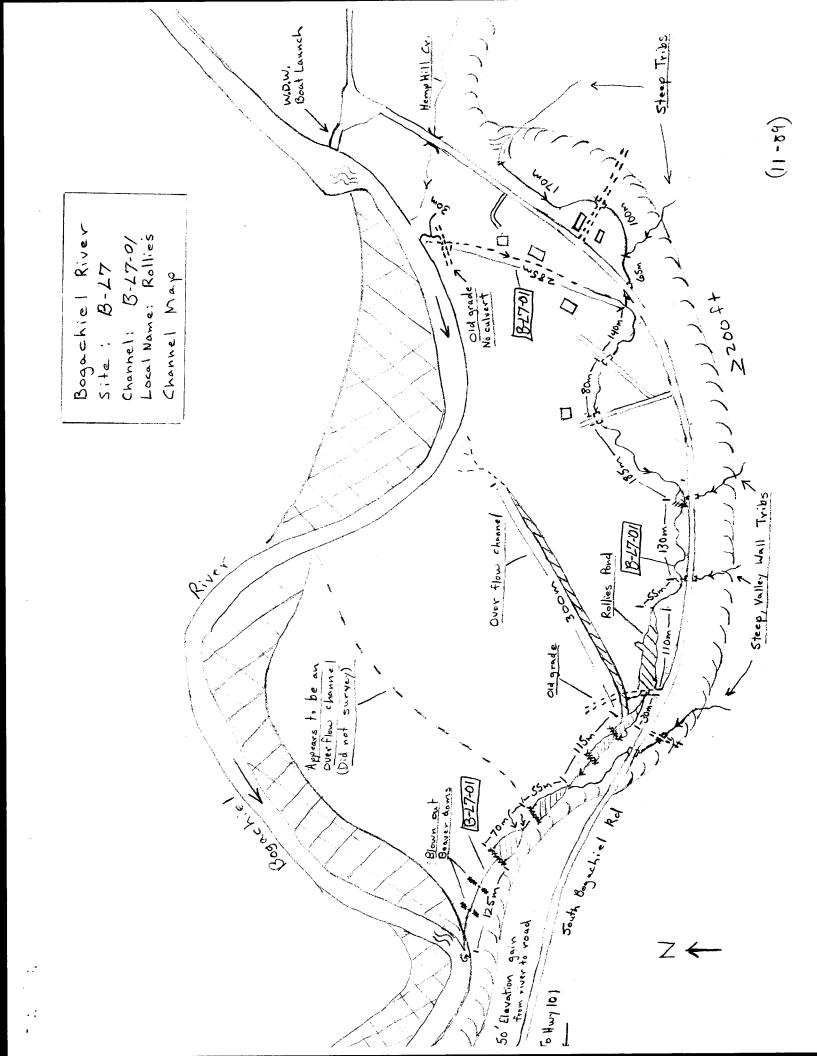
OBSERVER: King

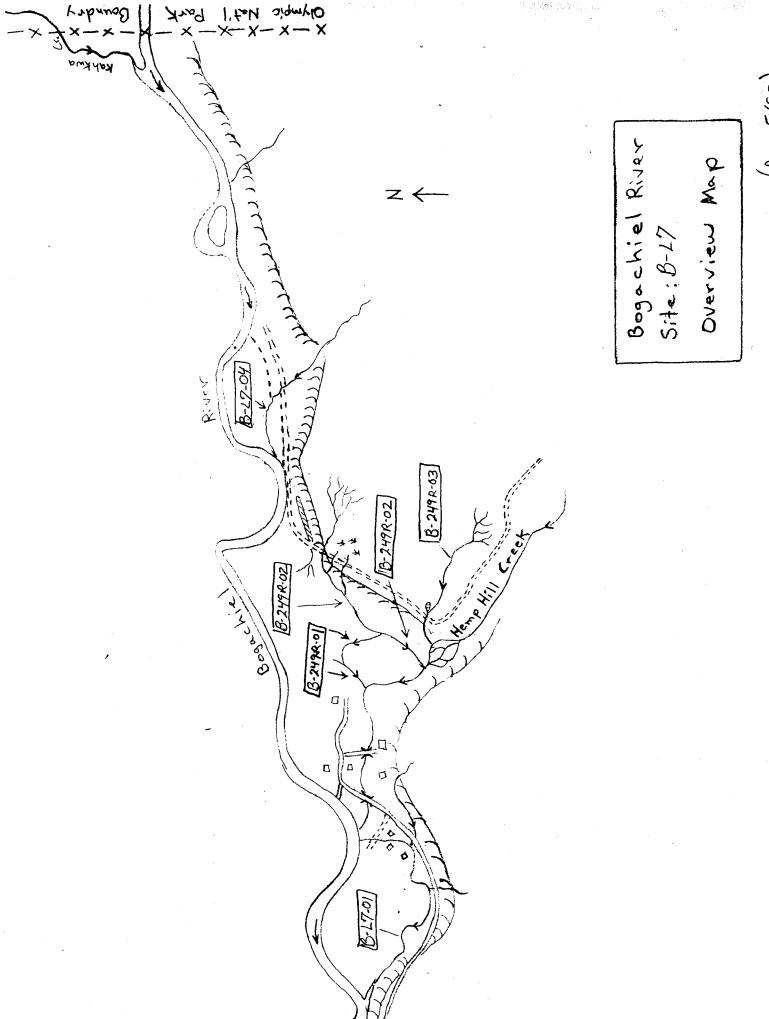
Has not rained for 2 weeks. Approx. 1/4 cfs flowing out of Rollies pond. Majority of the channel upstream of Rollies pond still has water except above the driveway where only isolated pools remain. There is still a small amount of spring flow coming through the upper culvert.

DATE: 11/30/98

OBSERVER: Powell

A recent significant mass wasting on adjacent hillside has affected this system. A tremendous amount of fine sediment has been deposited around and along this channel.





(Rev. 5/90)

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